Evidence-Based Healthy Aging Programming:

Tools & Checklists



www.healthyagingprograms.org



Introduction

Aging services providers are uniquely positioned to ensure that effective prevention programs are available to older people, including under-served older adults who often need such programs the most. Prevention is a key component of Administration on Aging's strategy for helping older people to remain healthy and independent. The National Council on Aging's Center for Healthy Aging serves as the National Resource Center for the AoA Evidence-Based Disease Prevention Initiative to help implement this strategy. The Center is working with AoA to make sure that older adults have access to prevention programs that can make a noticeable difference in their health and wellbeing. The Center is dedicated to helping community aging service providers, Area Agencies on Aging, and other service providers develop, implement, and evaluate evidence-based health promotion programming for older adults.

Evidence-based health promotion programming translates tested program models or interventions into practical, effective community programs that can provide proven health benefits to participants. Working with its numerous partners, including the Centers for Disease Control and Prevention's Healthy Aging Research Network, the Center tracks the latest research from the National Institutes on Health, CDC, Agency for Health Care Research and Quality, and other science agencies, and translates study findings into practical tools and resources for the aging network. Prevention topics receiving the most attention are physical activity, disease self-management, falls prevention, healthy eating, mental health and medication management. The Center also provides information on program operations – such as outreach, marketing, partnering, training, and evaluation.

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For More Information

The Center for Healthy Aging Web site - www.healthyagingprograms.org - includes all the tools and resources found in this document, as well as many others.



The Basic Components of Evidence-Based Health Promotion

Excerpt from *Using the Evidence Base to Promote Healthy Aging* www.healthyagingprograms.org/content.asp?sectionid=92&ElementID=97

Identify an important health issue and the population at risk

- 1. Review epidemiological and other data to identify key health/functional conditions and risk factors for older adults in the community.
- 2. Specify the characteristics and contexts of the population at risk and of the broader community (e.g., income, education, culture, geographic location, accessibility to services).

Identify effective intervention(s)

3. Systematically identify and review relevant research and information on proven interventions or models that address the targeted conditions or risk factors.

Establish broad-based partnerships

- 4. Recruit community partners to help interpret data on health conditions and risk factors, select among available interventions, and establish priorities.
- 5. Articulate methods and detailed procedures for addressing identified health issues through planned actions that include the involvement of relevant community stakeholders.

Select an intervention

6. Select a proven evidence-based intervention or model (from those in #3) that will be appropriate for the target community, suitable for adoption by providers, and feasible given available provider and community resources.

Translate the intervention into a program

- 7. Translate the tested intervention or model into a program suitable for implementation in the community while maintaining fidelity (i.e., the faithful and accurate reproduction of the intervention's core elements in the design and implementation of the translated program).
- 8. Recruit and retain high risk, older adults from the target population who can benefit from the intervention
- 9. Implement the translated program, maintaining fidelity to the core elements and design established in Step 7 while adapting key characteristics of the program (e.g., outreach methods, language level, and location of program) to the needs and characteristics of the target population.

Evaluate the program

- 10. Plan goals for process and outcomes evaluation, design instruments and protocols for data collections, and assign responsibilities for evaluation.
- 11. Provide midcourse feedback on program operations and implementation and decide what adjustments (if any) need to be made.
- 12. Measure and evaluate program delivery and outcomes to assess the effectiveness of the program or model and inform the next cycle of program planning.

Sustain the program

- 13. Determine the information, activities, and resources that maintenance of successful individual and program outcomes will require. Ask the following questions:
 - What long-term effects do we desire for program participants?
 - How can we support these effects programmatically?
 - What resources and partnerships will we need to maintain desired individual level outcomes and institutionalize the program?



Self-Assessing Readiness for Implementing Evidence-Based Health Promotion and Self-Management Programs

This tool provides a framework for discussions within a community aging service provider organization, or more appropriately among partnering organizations, interested in offering evidence-based health promotion and self-management programming. The tool focuses specifically on how to assess "readiness" to proceed with implementation. There are four key questions that should be addressed when determining whether your agency/partnership is "ready" to begin implementing evidence-based health programs. The answers to these questions will help you estimate potential for success with these types of projects. Ideally, your organization and partners will have a positive response to each question before moving forward with implementation. If not, you can work on enhancing readiness by addressing those areas that still need attention.

1. Is the agency/partnership willing to do evidence-based health programs and stay true to the model(s) being implemented?

- Can distinguish between evidence-based health programs and other programs
- Can build off existing health programming experience
- Can gain and keep the support of health care organizations
- Can preserve fidelity to key interventions and provide quality control while making necessary modifications

2. Is there funding for the program? New funding and/or willingness to reallocate current resources to support evidence-based health programming.

- Can secure sustainable funding for evidence-based health promotion and self-management programs
- Can engage a variety of funders in the importance of evidence-based health programs
- Can reallocate current funds to support new evidence-based health programs
- Can meet the demands of continuously increasing numbers of program participants

3. Is there access both to personnel with the expertise to do these programs, and to the population that needs these programs?

- Can recruit and retain staff or contractors who have knowledge of specific health promotion and self-management topic(s) and/or behavior change methods
- Can recruit and retain lay leaders, peer supporters and other "volunteers"
- Can draw upon appropriate experts to offer introductory and follow-up training and guidance
- Can attract the target population and continue to recruit on an on-going basis
- Can offer programming at times and places that are convenient for the target population

4. Is there buy-in from senior leadership and key partners as reflected in both programmatic and financial support?

- Can ensure that programs receive necessary time and attention by knowledgeable staff and agency leaders
- Board is aware of move to evidence-based health programming and is supportive
- Partners can commit existing funds or have identified new funding to build and sustain the program

This work was supported by the John A. Hartford Foundation of New York.



From Their Study to Your Demonstration: Tracking Similarities and Differences in Evidence-Based Program Implementation

Adapted from: Peterson, E. W. (2003). Using cognitive behavioral strategies to reduce fear of falling: A matter of balance. *Generations*. 26(4): 53

The purpose of this "tracking" tool is to help project teams to "translate" every detail of an evidence-based intervention into their own program development plan. Project teams can add more row topics and omit some of these, depending on their specific interventions. This is not a comprehensive planning tool - but a way to better understand the details of the original research and how those details will look in your plan.

	As Implemented in Original Research. Citation(s) for that study:	As Implemented by Demonstration Project Name of Project: (To be completed based upon current plans)
Reason for program implementation		, , , , , , , , , , , , , , , , , , ,
Number of older adult participants enrolled (specify ages; levels of disability; race/ethnicity; gender) - Any inclusion/exclusion criteria.		
Marketing and recruitment strategies and estimated number contacted/reached to achieve enrollment targets		
Number completing the program; reasons for dropping out; efforts at retention		
Individual(s) responsible for group facilitation (skill set; professional qualifications; training)		
Number and types of settings participating; willingness to implement the model; variability across settings in willingness/ability to implement		
Frequency and extensiveness of training for settings, for staff and for volunteers		
Content of program - (what is the protocol and what variations are expected?)		
Nature of group sessions - Can participants miss classes? How many and what are the rules?		



Average number of participants in each group	
Scheduling (number of sessions each week; number of weeks; consistency of schedule)	
Length of each session	
Room used privacy/interruptions and comfort	
Breaks/food & snacks (types; who provides snacks?)	
Supplemental activities, materials or programs for participants	
Types of partners/organizations assisting in this project and their roles	
Maintenance strategies for participants, for the program and/or for the settings	
Methods of documenting staff contact with participants, progress being made, referrals to other services	
When are participant measurements taken? (define pre and post)	
Estimated number of participants who will complete pre and post measures	
Measures of fidelity, e.g., related to training, program implementation, staff-participant interactions	
Other types of measures or assessments, e.g., negative outcomes; changes in staff attitudes/knowledge	



Maintaining Program Fidelity

("Fidelity Tool")

Oftentimes, program developers and prevention researchers are legitimately concerned that changes or adaptations to an evidence-based program will undermine its effectiveness. Community leaders and prevention practitioners are equally concerned that "not one size fits all." The inability to modify programs may produce local resistance; or worse, rigid fidelity may lead to programs that are irrelevant or even inappropriate for meeting community needs (SAMHSA, 2001).

Below, you will find some important suggested steps to take to help ensure maintenance of program fidelity, and successful adaptation of an evidence-based program for your community and its older adult population.

Planning and Program Development

Suggested Steps:

- 1. Project team reviews curriculum and published materials of evidence-based intervention.
- 2. Project team discusses the intervention and materials in depth and ensures that each team member understands the intervention and what makes it effective.
- 3. Project team identifies program components that may require adaptation from original evidence-based intervention, and develops justification for potential adaptations.
- 4. Published materials and other program information are "de-constructed" using the Center for Healthy Aging's tool, From Their Study to Your Demonstration: Tracking Similarities and Difference in Evidence-Based Program Implementation (the "Tracking Changes Tool") (www.healthyagingprograms.org/content.asp?sectionid=66&ElementID=336), or a similar approach.
- 5. A written, step-by-step plan is prepared that documents each step of program replication and how it will be implemented. Plan is compared to original intervention.
- 6. An external person, who knows the original intervention, reviews the plan (Step #5) and provides feedback to the project team.
- 7. Any adaptations made to the original intervention or training or curriculum are thoroughly discussed and documented. Strategies are identified to assure that these changes will not undermine the impact of the program on older adults' health outcomes.
- 8. Specific strategies to protect fidelity are identified for five components: study design, training, delivery, receipt, and enactment (Bellg et al., 2004).

Implementation

Suggested Steps:

- 1. Key staff, coaches, and facilitators are trained using the materials and curriculum from the original intervention. Building upon materials from the intervention study, detailed manuals documenting necessary adaptations to the original intervention study are prepared and made available to implementation sites.
- 2. Training of trainers (ToT) is intensive (typically 2-4 days) and conducted by a "master trainer" or other person who is well-versed in all aspects of the intervention.
 - a. ToT trainees model their roles as trainers or facilitators during training. This roleplaying is observed by the "master trainer," feedback is provided and improvement is



demonstrated. This training is very interactive, with opportunity for discussion, small group practice sessions, peer evaluation and modeling.

- Clear job descriptions for implementation staff and volunteers are developed, and include a
 major emphasis on the importance of consistent and faithful implementation of the program.
 During interviews, an explanation of fidelity and its importance are provided to applicants,
 and common challenges to fidelity, as well as strategies to enhance and monitor fidelity are
 discussed.
- 4. Process evaluation methods, including periodic on-site observations and reviews of implementation staff (trainers, facilitators, activity instructors, peer leaders, case managers, etc) are conducted to ensure that the program is being implemented consistently and with fidelity in all locations.
 - a. Reviewers use standardized tools and checklists to make these assessments.
- 5. Implementation staff (e.g., physical activity instructors, peer leaders, case managers), have a checklist that they use to assess their own performance and maintenance of fidelity.
- 6. Available one-on-one technical assistance and problem-solving are utilized when necessary.
- 7. Periodic meetings with implementation staff are held to review activities and procedures and address challenges.
 - a. During these meetings, the performance and fidelity checklists are reviewed and discussed.

Evaluation

Suggested Steps:

- 1. Training on appropriate ways to gather data (distribute surveys, assist clients/participants to respond, etc) is provided to multiple levels of program staff.
 - a. This training should be interactive, and include practice sessions and discussion of anticipated barriers/difficulties in data collection.
- 2. Periodic reliability checks of data collection and completeness of data are done by program administration staff to ensure that evaluation surveys are administered in the same way and at the same time across program locations.
- 3. Data is collected utilizing most of same outcome measures as the original evidence-based intervention. Performance-based measures are included when possible, with feedback provided to clients at planned intervals.
- 4. Data collection methods may require adaptations in administration, such as collecting data inperson rather than by telephone. These adaptations will be documented during the planning phase.
- 5. Measurement of outcomes will utilize the same follow-up measurement intervals as the original evidence-based intervention. Any adaptations to the original study measurement intervals will have been discussed and documented during the planning phase of the project.
- 6. Process measures used to monitor fidelity are assessed using the BCC framework (design, training, delivery, receipt and enactment) (Bellg et al., 2004).



- 7. Outcome measures are selected to permit comparisons to original intervention studies.
- 8. Satisfaction measures (clients, staff, partners) are also included.
 - a. Additional measures as required by program partners may be necessary.
- 9. Attendance/client contacts are tracked at the individual level to document dose, frequency, and length of participation.

References

Bellg et al. (2004). Enhancing treatment fidelity in health behavior change studies: best practices and recommendations from the NIH Behavior Change Consortium. *Health Psychology*, 23(5), 443-51. www.healthyagingprograms.org/content.asp?sectionid=66&ElementID=337

SAMHSA. (2001). Finding the balance: Program fidelity and adaptation in substance abuse prevention. modelprograms.samhsa.gov/pdfs/FindingBalance.pdf



Checklist for Fall Prevention Programs

This checklist provides a brief guide to assessing the quality of fall prevention programs. It was developed by selected experts involved in the National Falls Free Coalition (www.healthyagingprograms.org/content.asp?sectionid=113). The purpose of the checklist is to help community teams to "ask the right questions" about a specific fall prevention intervention and to weigh the pros and cons of different interventions.

A number of meta-analyses have identified three specific *types* of interventions that are effective in reducing falls. Each of these types can be effective, and projects that include more than one are likely to add to the effectiveness. The three types of interventions are:

- Clinical assessment to identify an individual's risk factors, followed by a tailored intervention to reduce as many of these factors as possible.
- Exercise programs that improve leg strength and balance, such as Strong for Life, Tai Chi, or a multi-component exercise program with adequate attention to strength and balance.
- Multi-component interventions that include education about fall prevention, exercise programs or physical therapy, and medication management, such as Matter of Balance. These programs may also include vision correction, and home modification.

Checklist Questions

- 1. Does the program clearly target a population in need of fall prevention programs?
- 2. Is the program suitable for diverse participants (e.g., age, gender, ethnicity, functional status)?
- 3. Can this program be implemented in a variety of settings?
- 4. Does the program offer strategies to modify program components to meet older adult needs, especially the more frail older adult?
- 5. Does the program provide a systematic strategy to reduce the risk of activity-related injuries?
- 6. Are there materials and training manuals available to support implementation? Is there a Web site or contact information to obtain these materials and other assistance?
- 7. Does the program offer effective strategies for linking participants and the program itself with health care providers as needed?
- 8. Does the program offer a group-based physical activity component that includes trained, qualified instructors, supervision, and opportunities for social interaction?
- 9. Does the program include safe and effective endurance, lower body strength, balance, and flexibility components that are tailored to meet the needs of the participants?
- 10. Are there strategies that address fall prevention education, and opportunities for social support to promote the adoption of healthy behaviors?
- 11. Does the program address motivation for exercise and other types of positive behavior change?
- 12. Does the program promote falls self-efficacy among the participants?



- 13. Does the program include methods for maintaining fidelity to the key elements of the original program and for monitoring and maintaining program quality over time?
- 14. Does the program include appropriate and easy-to-administer performance measures?
- 15. Does the program improve functional ability? Can these improvements be documented with simple pre- and post-functional measures?



Checklist for Structured Physical Activity Programs for Older Adults

This checklist provides a brief method for assessing the quality of structured physical activity programs for older adults. The purpose of the checklist is to help community teams to "ask the right questions" about a specific physical activity intervention, and to weigh the pros and cons of different interventions. It was developed by selected experts involved in the National Blueprint: Increasing Physical Activity Among Adults Aged 50 and Older (www.agingblueprint.org).

The checklist items are derived in part from Cress, M. et al. (2004). ACSM Best Practices Statement—Physical activity programs and behavior counseling in older adult populations. *Medicine and Science in Sports and Exercise*, 36(11). 1997-2003.

This article is summarized in NCOA's Center for Healthy Aging issue brief, *Designing Safe and Effective Physical Activity Programs*, which can be downloaded from the following site: www.healthyagingprograms.org/content.asp?sectionid=73&ElementID=98.

Checklist Questions

- 1. Does the program incorporate safe and effective endurance, strength, balance, and flexibility components that are tailored to meet the needs of the participants?
- 2. Does the program offer group-based physical activity options with instruction in proper technique, and qualified supervision?
- 3. Does the program regularly re-assess the recommended intensity, duration, and frequency of physical activity for all participants?
- 4. Does the endurance-related component of the program involve large muscle groups and is it sustained for at least 10 minutes for beginners with an eventual goal of 30 minutes of moderate intensity activity for most participants?
- 5. Does the program offer opportunities for both upper and lower body resistance exercise in which the workload is re-assessed on a regular basis and increased as appropriate?
- 6. Does the program provide opportunities for participation in flexibility and stretching activities that facilitate increased range of motion?
- 7. Does the program include opportunities for both static and dynamic balance activities?
- 8. Does the program assess the functional fitness (including cardiovascular, strength, flexibility, and balance) levels of participants on a regular (at least annual) basis?
- 9. Does the program include a variety of support strategies designed to maximize recruitment, increase motivation for exercise progression, and minimize attrition? Consider the following (a-f):
 - a. pre-activity physical activity counseling
 - b. individualized goal setting sessions
 - c. pairing participants with exercise buddies
 - d. telephone or mail follow-up of individuals with repeated absences
 - e. inviting family and friends to attend orientation meetings and social events
 - f. other strategies (describe)



- 10. Does the program have a systematic and approved strategy for risk management and prevention of activity-related injuries?
- 11. Does the program have a formal emergency management protocol, including written emergency procedures posted in a readily accessible location?
- 12. Are program personnel trained in CPR and first aid?

Additional Description of the Program

The following questions provide valuable information but they cover material that is NOT included in the ACSM Best Practice document.

- 13. Does the program clearly target a population in need of physical activity programs?
- 14. Does the program include diversity of participants (e.g., age, gender, ethnicity, functional status)?
- 15. Can this program be implemented in a variety of settings?
- 16. Does the program offer strategies to modify program components to meet a variety of older adult needs, especially the more frail older adult?



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